

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

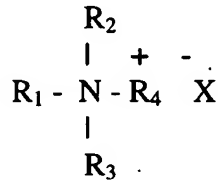
**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

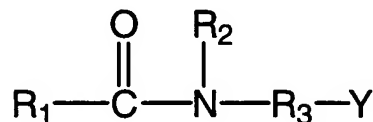
1. (Currently Amended) A method of completing an interval of an open hole wellbore penetrating a subterranean formation comprising the steps of:
 - a. drilling the wellbore into the formation with a drill string and an oil-based mud,
 - b. pulling out the drill string,
 - c. running a sand control string comprising one or more screens and one or more alternate path shunt tubes into the wellbore containing the oil-based mud,
 - d. setting a packer at or near the location at which the wellbore penetrates the formation,
 - e. gravel packing with an aqueous viscous viscoelastic surfactant based carrier fluid, said viscoelastic surfactant present in an amount effective to provide viscosity sufficient to carry the gravel, said carrier fluid being insensitive to the oil-based mud for a time sufficient to place the gravel and said carrier fluid being capable of ~~breaking in the presence of~~being broken by produced fluid, and
 - f. producing fluid from the wellbore.
2. (Original) The method of claim 1 wherein the wellbore is horizontal or highly deviated.
3. (Original) The method of claim 1 wherein the oil-based mud is an invert emulsion oil-based mud.

4. (Original) The method of claim 1 wherein the viscous viscoelastic surfactant based carrier fluid comprises an effective amount of a quaternary ammonium salt of the amine corresponding to the formula



wherein R₁ is at least about a C₁₆ aliphatic group which may be branched or straight chained and which may be saturated or unsaturated, R₂, R₃, and R₄ are each independently, a C₁ to about C₆ aliphatic group which can be branched or straight chained, saturated or unsaturated and which may be substituted with a group that renders the R₂ or R₃ group more hydrophilic, none of R₁, R₂, R₃ or R₄ is hydrogen, and the R₂, R₃ and R₄ groups may be formed into a heterocyclic 5- or 6-member ring structure which includes the nitrogen atom of the amine, and X⁻ is an inorganic anion.

5. (Original) The method of claim 4 wherein said viscous viscoelastic surfactant based carrier fluid comprises erucyl bis(2-hydroxyethyl) methyl ammonium chloride.
6. (Original) The method of claim 1 wherein the viscoelastic surfactant gel comprises



in which R₁ is a hydrocarbyl group that may be branched or straight chained, aromatic, aliphatic or olefinic and has from about 14 to about 26 carbon atoms and may contain an amine; R₂ is hydrogen or an alkyl group having from 1 to

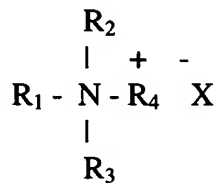
about 4 carbon atoms; R_3 is a hydrocarbyl group having from 1 to about 5 carbon atoms; and Y is an electron withdrawing group.

7. (Original) The method of claim 6 wherein the viscoelastic surfactant gel comprises a betaine.
8. (Original) The method of claim 7 wherein the viscoelastic surfactant gel comprises BET-E-40.
9. (Original) The method of claim 1 wherein the viscoelastic surfactant gel comprises CaCl_2 .
10. (Original) The method of claim 1, wherein the step of gravel packing is performed above the formation fracture pressure.
11. (Currently Amended) A method of completing an interval of an open hole wellbore penetrating a subterranean formation comprising the steps of:
 - a. drilling the wellbore into the formation with a drill string and an oil-based mud,
 - b. pulling out the drill string,
 - c. running a sand control string comprising one or more screens, one or more alternate path shunt tubes, and a shroud into the wellbore containing the oil-based mud,
 - d. setting a packer at or near the location at which the wellbore penetrates the formation,
 - e. displacing at least a portion of the oil-based mud with a non-damaging aqueous fluid insensitive to oil-based mud, up to the packer,
 - f. gravel packing with an aqueous viscous viscoelastic surfactant based carrier fluid, said viscoelastic surfactant present in an amount effective to provide viscosity sufficient to carry the gravel, said carrier fluid being insensitive to the at least partially displaced oil-based mud for a time

sufficient to place the gravel and said carrier fluid ~~being capable of breaking in the presence of~~ capable of being broken by produced fluid, and

g. producing fluid from the wellbore.

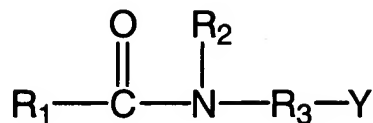
12. (Original) The method of claim 11 wherein the wellbore is horizontal or highly deviated.
13. (Original) The method of claim 11 wherein the oil-based mud is an invert emulsion oil-based mud.
14. (Original) The method of claim 11 wherein the viscous viscoelastic surfactant based carrier fluid comprises an effective amount of a quaternary ammonium salt of the amine corresponding to the formula



wherein R₁ is at least about a C₁₆ aliphatic group which may be branched or straight chained and which may be saturated or unsaturated, R₂, R₃, and R₄ are each independently, a C₁ to about C₆ aliphatic group which can be branched or straight chained, saturated or unsaturated and which may be substituted with a group that renders the R₂ or R₃ group more hydrophilic, none of R₁, R₂, R₃ or R₄ is hydrogen, and the R₂, R₃ and R₄ groups may be formed into a heterocyclic 5- or 6-member ring structure which includes the nitrogen atom of the amine, and X⁻ is an inorganic anion.

15. (Original) The method of claim 14 wherein said viscous viscoelastic surfactant based carrier fluid comprises erucyl bis(2-hydroxyethyl) methyl ammonium chloride.

16. (Original) The method of claim 11 wherein the viscoelastic surfactant gel comprises



in which R₁ is a hydrocarbyl group that may be branched or straight chained, aromatic, aliphatic or olefinic and has from about 14 to about 26 carbon atoms and may contain an amine; R₂ is hydrogen or an alkyl group having from 1 to about 4 carbon atoms; R₃ is a hydrocarbyl group having from 1 to about 5 carbon atoms; and Y is an electron withdrawing group.

17. (Original) The method of claim 16 wherein the viscoelastic surfactant gel comprises BET-E-40.
18. (Original) The method of claim 11 wherein the viscoelastic surfactant gel comprises CaCl₂.
19. (Original) The method of claim 11, wherein the step of gravel packing is performed above the formation fracture pressure.
20. (Original) The method of claim 11 wherein said non-damaging aqueous fluid insensitive to oil-based mud is selected from the group consisting of an aqueous hydroxyethyl cellulose solution, an aqueous xanthan solution, and an aqueous clarified xanthan solution.
21. (Original) The method of claim 11, wherein after the step of displacing at least a portion of the oil-based mud with a non-damaging aqueous fluid insensitive to oil-based mud up to the packer, a non-damaging aqueous fluid insensitive to oil-based mud is used as a pre-pad.
22. (Original) A method of completing an interval of an open hole wellbore penetrating a subterranean formation comprising the steps of:

- a. drilling the wellbore into the formation with a drill string and an oil-based mud,
 - b. pulling out the drill string,
 - c. running a sand control string comprising one or more screens, one or more alternate path shunt tubes, and a shroud into the wellbore containing the oil-based mud,
 - d. setting a packer at or near the location at which the wellbore penetrates the formation,
 - e. injecting a non-damaging aqueous fluid insensitive to oil-based mud as a pre-pad,
 - f. gravel packing with an aqueous viscous viscoelastic surfactant based carrier fluid, said viscoelastic surfactant present in an amount effective to provide viscosity sufficient to carry the gravel, said carrier fluid being insensitive to the at least partially displaced oil-based mud for a time sufficient to place the gravel and said carrier fluid being capable of breaking in the presence of produced fluid, and
 - g. producing fluid from the wellbore.
23. (Original) The method of claim 22 wherein said non-damaging aqueous fluid insensitive to oil-based mud is selected from the group consisting of an aqueous hydroxyethyl cellulose solution, an aqueous xanthan solution, and an aqueous clarified xanthan solution